

Title: DSP-4 DUAL-SPECIFICITY PHOSPHATASE

Express Mail No. EV336597929US

Inventor(s): Ralf M. Luche and Bo Wei Serial No. 09/544,517 Docket No. 200125.410

DSP4, ENCODED BY 651 BASE PAIRS

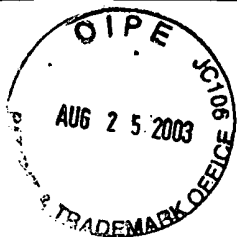
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TTTCCCTTTT TTGGAGAGTA GACTAGCAAA ACTCCCTTTT TTCTCTTGCC TTTTATATGC ATAAATGGAG GTCAATCTGA TTGTCCTGAC
CTACTGTATA AGTAAATTC AAATGTCATT ACTTCTCTT TGTTATTATA ATGTGTGATT AAATGCTTTT TTAAATTGCT AAGGGAAAAT
AAAAAA

Fig. 1

TRANSLATED, 217 AMINO ACIDS

MYSLNQEIKAFSRNNLRKQCTRVTTLTGKKIIETWKDARIHVVEEVEPSSGGGCGYVQDLSSDLQVGVIKPL
LLGSQDAAHDLTLKKNKVTHILNVAYGVENAFSLDFTYKISILDLPETNLSYFPECFEFIEEAKRKDGVV
LVHCNAGVSRAAAIVIGFLMNSEQTSFTSAFSLVKNARPSICPNSGFMEQLRITYQEGKESNKCDRIQENS

Fig. 2



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1 10 20 30 40 50 60 70 80 90 100
PYST1, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-7, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
hVH5 |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
PAC1 |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-1, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-4, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-5, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
DSP-4 |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Consensus p s q g IIP LyLgS a l# \$ glt LnwS pn f f %k !p! D iss f eai FI

101 110 120 130 140 150 160 170 175
PYST1, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-7, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
hVH5 |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
PAC1 |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-1, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-4, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
MKP-5, |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
DSP-4 |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
Consensus # ak k g VIVHC Ag!SRsat! a%In s A% f!K rr !sPNf F\$gql l y#

Fig. 3



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- Northern blot analysis

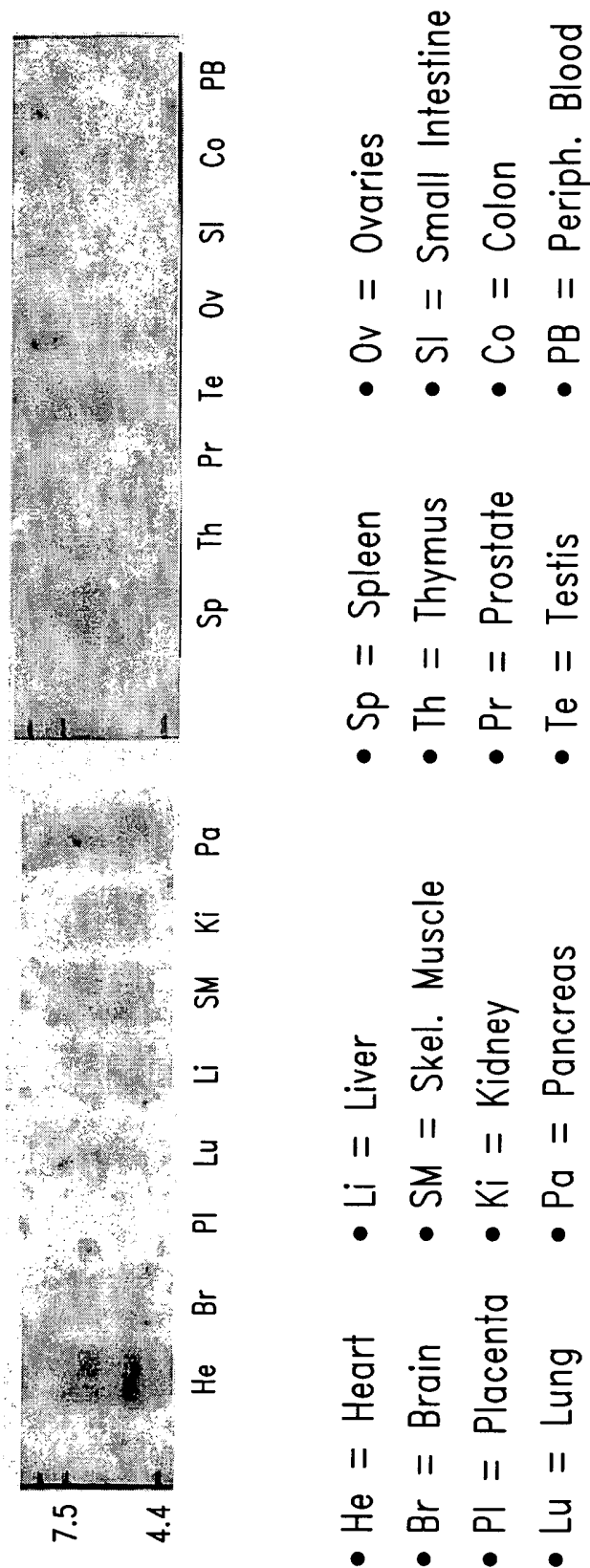


Fig. 4A

Fig. 4B